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November 28, 2005

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W., Suite TW-A325
Washington, D.C. 20554

**Re: Compliance with the Commission's 911 Requirements for
Interconnected VoIP Services, WC Docket Nos. 04-36 & 05-196**

Dear Ms. Dortch:

AOL Enhanced Services, LLC ("AOL"), a wholly owned subsidiary of America Online, Inc., submits this Compliance Letter in response to the Commission's *VoIP E911 Order* and its Public Notice of November 7, 2005.¹ As reflected in AOL's previous submissions in the above-referenced dockets, AOL has fully complied with the Commission's subscriber notification, acknowledgement, and labeling requirements and it has worked exhaustively to develop technical solutions that will detect when a subscriber attempts to use the AOL TotalTalk Service from any

¹ *IP-Enabled Services; E911 Requirements for IP-Enabled Service Providers*, First Report and Order and Notice of Proposed Rulemaking, 20 FCC Rcd 10245, 10273 ¶ 50 (2005) ("*VoIP E911 Order*"); Public Notice, *Enforcement Bureau Outlines Requirements of November 28, 2005 Interconnected Voice Over Internet Protocol 911 Compliance Letters*, WC Docket Nos. 04-36 & 05-196 (Nov. 7, 2005) ("*November 7 Public Notice*").

location other than the Registered Location.² AOL welcomes this additional opportunity to detail the compliance of its TotalTalk service with the Commission's 911 rules for interconnected VoIP services. AOL responds below to the specific questions set forth in the *November 7 Public Notice*.

1. 911 Solution

As described below, AOL provides E911 service to 100 percent of its TotalTalk subscribers as required by the Commission's rules. AOL relies on its carrier partner, Level 3 Communications, LLC ("Level 3") to provide network transmission, interconnectivity, and E911 capabilities. Level 3 has indicated that, as of November 18, 2005, it provided E911 service that reaches approximately 68 percent of U.S. households and that this percentage will increase in the near future. AOL is able to provide E911 service only within Level 3's E911 footprint and accordingly will not register any person who submits a Registered Location outside Level 3's coverage area.

- **911 Routing Information/Connectivity to Wireline E911 Network.** On AOL's behalf, Level 3 transmits "all 911 calls to the appropriate PSAP, designated statewide default answering point, or appropriate local emergency authority utilizing the Selective Router, the trunk line(s) between the Selective Router and the PSAP, and such other elements of the Wireline E911 Network as are necessary in those areas where Selective Routers are utilized."³ Level 3's E911 service provides direct connectivity to all Selective Routers within its E911 footprint. All 911 calls made using Level 3's E911 services are routed by the Selective Routers to the appropriate PSAP on dedicated trunk lines or are otherwise directly routed to the appropriate PSAP. Level 3 had direct connectivity to

² See Letter of Curtis Lu, Acting General Counsel, America Online, Inc., to Marlene Dortch, Secretary, FCC, WC Docket Nos. 04-36 & 05-196 (Nov. 25, 2005) (describing movement-

detection solutions) ("*AOL Movement-Detection Solution Letter*"); Letter of Tekedra M. Jefferson, Assistant General Counsel, America Online, Inc., to Marlene Dortch, Secretary, FCC, WC Docket No. 05-196 (Aug. 10, 2005) (reporting that AOL had obtained acknowledgements from 98% of its subscribers as of August 10, 2005). AOL has since obtained acknowledgements from the remaining 2% of its subscribers.

³ *November 7 Public Notice* at 3 (quoting *VoIP E911 Order* at ¶ 42).

approximately 315 Selective Routers as of November 18, 2005, and it expects this number to increase in the near future.

- **Transmission of ANI and Registered Location Information.** On AOL's behalf, Level 3 transmits ANI and Registered Location information via the Wireline E911 Network to all answering points that are capable of receiving and processing this information within Level 3's E911 footprint.⁴
- **911 Coverage.** As noted above, AOL has achieved full 911 compliance in all areas of the country in which it offers an interconnected VoIP service. Moreover, as described below, AOL will suspend all TotalTalk calling capabilities whenever a subscriber indicates an intent to access the service from a location other than the Registered Location. Because AOL relies on Level 3 to provide E911 capabilities, AOL's ability to provide E911 in areas outside Level 3's E911 footprint — where AOL does not currently offer VoIP service — will depend on Level 3's progress in expanding that footprint.

2. Obtaining Initial Registered Location Information

AOL has obtained each existing subscriber's Registered Location and obtains each new subscriber's Registered Location through the TotalTalk registration process. During that process, AOL requires the potential subscriber to input the service address from which TotalTalk will be used. The address is validated with Level 3 to ensure that it is within Level 3's E911 footprint. If the address is within that footprint, the individual is permitted to proceed with the registration process. If the address cannot be validated, then AOL sends a message indicating that TotalTalk is not available at the individual's location. This process ensures that TotalTalk is provisioned only at addresses for which E911 service is available. Because AOL implemented this registration system before launching the TotalTalk service, AOL has the Registered Location for 100% of its TotalTalk subscribers.

⁴ Although AOL interprets the *VoIP E911 Order* to authorize the provision of VoIP service during the interval when a subscriber's Registered Location cannot be transmitted to the PSAP because the ALI database update is pending, *see VoIP E911 Order* at ¶ 44 & n.143, AOL has decided out of an abundance of caution to delay initiation of service to subscribers obtaining new telephone numbers until AOL obtains confirmation that E911 is activated at the Registered Location. If a customer ports a telephone number from a local telephone company, AOL will provide VoIP service immediately, because any suspension would threaten to deprive the subscriber of lifeline communications capabilities. During the initial interval when the ALI update is pending and location information thus cannot be passed to a PSAP, Level 3 will transmit any 911 calls to the geographically appropriate PSAP with the subscriber's call-back information. AOL is working with Level 3 to ensure that this initial interval is as brief as possible.

3. Obtaining Updated Registered Location Information

While AOL does not currently enable subscribers to use TotalTalk nomadically, it offers subscribers several ways to update their Registered Location, consistent with the Commission's rules. These tools enable subscribers to indicate the location from which they plan to use the Telephone Adapter ("TA") or the "soft phone" feature of TotalTalk (the softphone enables VoIP communications using the America Online, Inc. instant messaging ("AIM") platform).

Subscribers can update the TA location by calling — via the telephone connected to the TA — a TotalTalk Member Services representative to change the TA location. The TA location also can be updated on the TotalTalk web Dashboard, where the Registered Address is saved as an account setting. Finally, a subscriber can update the TA location by accessing an interactive voice menu and selecting the Registered Location. If the subscriber informs AOL of a permanent move of the TA to a new location, and the new address is within Level 3's E911 footprint, AOL will activate service at the new Registered Location. In addition, if AOL authorizes subscribers to use TotalTalk nomadically (again, such use is not permitted currently), subscribers will have the ability to update their temporary location information thru the means discussed herein.

For subscribers using the soft phone feature, the Registered Location must be confirmed by the subscriber at the beginning of every AIM client session using a simple web interface. Unless and until the subscriber confirms that he or she remains at the Registered Location using this interface, all soft phone calling capabilities will be disabled. As with use of the TA, if AOL authorizes nomadic use of the soft phone in the future, subscribers will be able to enter an alternative location at the start of an AIM client session. If and only if E911 service is available from that location, calling capabilities will be enabled.

4. Technical Solution for Nomadic Subscribers

As explained in an earlier letter,⁵ AOL has taken steps to prohibit subscribers from using TotalTalk nomadically and also is working exhaustively on a movement-detection solution to provide additional safeguards.

More specifically, if a subscriber notifies AOL that she will access the TotalTalk service from anywhere other than the Registered Location, AOL will suspend the calling capabilities of the subscriber's TA and/or the soft phone. The

⁵ *AOL Movement-Detection Solution Letter.*

subscriber will receive an intercept message indicating that calls cannot be placed from a location other than the address provided at the time of registration.⁶

In addition, AOL is in the process of implementing a movement-detection solution akin to AT&T's "Heartbeat Solution"⁷ to address the possibility that a subscriber could move the TA *without* informing AOL. Like other VoIP providers, AOL receives signals (or "heartbeats") from its TAs that enable the network to determine whether the TA has been disconnected from its power source and then reconnected. When such a disconnection followed by a reconnection occurs, because it could indicate that the subscriber has moved the TA to a new location, AOL will temporarily suspend the TA's calling capability until the subscriber confirms that the TA has not been moved.⁸ Specifically, AOL will notify the subscriber of the need to confirm the Registered Location before placing any calls. If the subscriber attempts to place a call before responding to this message, AOL will institute a call intercept that requires the subscriber to confirm the existing Registered Location.⁹ Once the subscriber provides this confirmation, service will be promptly restored and calls will then be completed. If the subscriber instead indicates a new address, service will remain suspended until the subscriber provides confirmation that the TA has returned to the Registered Location.¹⁰

⁶ If a caller attempts to dial 911 while the TotalTalk service is temporarily suspended as a result of a known location change, AOL will intercept the 911 call and direct the subscriber to contact emergency services through other means. Transmitting the 911 call to the PSAP serving the default Registered Location after the subscriber has indicated his absence from that location would undermine, rather than promote, public safety.

⁷ See Ex Parte Letter of Robert W. Quinn, Federal Government Affairs Vice President, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 04-36 & 05-196 (Oct. 7, 2005) ("*AT&T Heartbeat Letter*").

⁸ The current solution available from AOL's vendor can detect when a TA has been disconnected and reconnected, unless the reconnection occurs in less than 60 minutes. AOL is already working to promptly develop the capability to detect any disconnection followed by a reconnection that occurs within 30 minutes. See *AOL Movement-Detection Solution Letter*.

⁹ If a customer dials 911 while the service is suspended as a result of a *possible* location change, AOL will route the 911 call to the PSAP associated with the subscriber's Registered Location, because most power interruptions will not in fact indicate a location change.

¹⁰ While implementation of this solution requires the development of new systems and interfaces, as well as testing and debugging, AOL expects to complete these steps no later than December 31, 2005. If AOL does not complete its implementation of the technical solution by that date, it has committed to making

For calls placed through the soft phone feature of TotalTalk, AOL has developed an electronic interface that provides protections equivalent to those afforded by the “heartbeat” approach. Each time a TotalTalk subscriber logs onto the AIM service, the interface will require an affirmative confirmation of the subscriber’s location. If the subscriber confirms use of the feature from the Registered Location, the call will be transmitted and E911 service will be available just as if the 911 call were placed from the TA. If the subscriber indicates an address other than the Registered Location, as noted above AOL will suspend the soft phone calling feature and notify the subscriber accordingly.

AOL is pleased to have the opportunity to describe its compliance with the *VoIP E911 Order*. Please contact the undersigned if you have any questions regarding the matters discussed in this letter.

Respectfully submitted,

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escalating voluntary contributions to a public safety foundation for each “grandfathered” subscriber and to refraining from signing up new customers until the solution is in place. *See AOL Movement-Detection Solution Letter.*